

Appl. No. 10/053,089
Amdt. dated May 17, 2006
Reply to Office Action of February 22, 2006

Atty. Ref. 81800.0178
Customer No. 26021

Remarks/Arguments

Reconsideration of this application is requested.

Claim Status

Claims 1-20 are pending. Since no claims are added, amended or canceled, no listing of claims is required under 37 CFR 1.121.

Claim Rejections – 35 USC 103(a)

Claims 1-20 are rejected under 35 USC 103(a) as obvious over Chimura (US 6,285,466) in view of Nakamura (US 4,999,716). Applicant respectfully traverses these rejections and requests reconsideration of the final action.

As was previously argued, the present invention provides a novel means for accommodating interruptions in facsimile communication. With reference to claim 1 and applicant's Fig. 1, a gateway device (60B) receives packet data from a second communication network (Internet 40). The gateway device includes a control unit that inverts the packet data into facsimile image data for transmission to a second communication terminal device (facsimile machine 20B) via a third communication network (PSTN 50B).

Before transmitting the facsimile image data to facsimile machine 20B, gateway device first tests the line conditions. As is known in the art, this is accomplished by use of test data, typically a training check field (TCF) signal. Typically, a string of zeros are transmitted for a set time. If facsimile machine 20B receives all zeros, this indicates that the test data was successfully transmitted and that line conditions did not cause any of the zeros to change. However, if many of the zeros have changed to ones, this indicates that line conditions are bad or noisy, and facsimile machine 20B will respond with a failure to train (FTT) signal.

The novel aspect of the present invention resides in a purposeful manipulation of the TCF signal to signal an error, when no error in fact exists, when a full page of image data has not yet been received and stored for transmission by gateway device 60B to facsimile machine 20B, i.e., when the image data is "less than a prescribed amount". Thus, while gateway device 60B is waiting

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to receive the image data, it sends out a TCF signal falsely indicating an error condition (i.e. a string including many ones, rather than zeros). On receiving this TCF signal, facsimile machine 20B believes there is a line error and is obliged to send out an FTT signal in response. Thus, by the mere process of sending a false TCF signal and receiving a reply, gateway device 60B effectively "buys time" waiting for a full page of image data without having to adjust (lower) transmission speed. This process is repeated until the full page of image data is received (see Fig. 4).

Nakamura bears no relevance to this novel process. Nakamura describes two different types of FTT signals that might be used by the destination facsimile machine – a standard FTT signal (Fig. 5) and a new FTT signal with a facsimile information field added (Fig. 6) (Nakamura, col. 7, lines 35-41). The source facsimile machine indicates to the destination facsimile machine which of these FTT signals should be used by adding a predetermined number of bits to the non-standard facilities set-up signal (NSS) that is sent, along with the training check field (TCF) signal, to the source facsimile machine (Nakamura, col. 7, lines 55-66).

Thus, Nakamura discloses that a source fax machine sets the bits of an NSS signal to indicate to the destination fax machine which of two types of FTT signals the destination fax machine should use. These bits have nothing to do with errors, and they are not preset to indicate that an error condition exists. Rather, they are preset to indicate which of two types of FTT signals should be used. Thus, applicant strongly disagrees with the Examiner's position that this disclosure reads on applicant's requirement, in independent claims 1, 10 and 19, of appending error data preset to indicate that an error condition exists to test data.

Moreover, applicant's claims require that the preset error data be appended to *test data used for a training purpose*. That is, the preset error data is appended to the TCF signal. Not only is the data relied on by the examiner not preset error data, but rather, data used to indicate which of two types of signals should be used, it is also not appended to test data used for a training purpose. It is appended to

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the non-standard facilities set-up signal (NSS), and not to the TCF signal which is used for a training purpose.

Nakamura does disclose use of a TCF signal, however, it is used in a completely conventional manner. The TCF signal sent by the source machine comprises a predetermined number of zeros. There is no disclosure anywhere in Nakamura (or Chimura) that the TCF signal is purposely preset to indicate an error condition. It is conventionally set as a predetermined number of zeros which, if they make it to the destination unaltered, indicates that an error condition does not exist. The destination machine receives the TCF signal, counts how many zeros changed to ones, and thereby determines a bit error number. In this regard, it is important to note that Nakamura uses this bit error number to determine an appropriate transmission speed (col. 8, lines 25-30). This is in contravention to applicant's specific purpose, which is knowing manipulation of the TCF signal to prevent a change in transmission speed.

For these reasons, applicant respectfully traverses the rejections and submits that the final rejections of the claims should be withdrawn.

Conclusion

This application is allowable over the references of record. The Examiner is urged to telephone the undersigned to discuss any issues that remain after consideration of this response. Any fees due with this response may be charged to our Deposit Account No. 50-1314.

Respectfully submitted,
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